JACKSONVILLE DISTRICT

STAFF SUMMARY

NAME: Bill Fonferek DATE: 07/25/2001 SUSPENSE:

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			Concur (initials)				Concur (initials)
[x]	DE	COMMANDER	5 Sep 01 PC	[ ]	IM	INFORMATION MGMT	
[x]	DD	DEPUTY COMMANDER		[ ]	IR	INTERNAL REVIEW	
[ ]	DS	DEP CDR, ANTILLES		[ ]	LM	LOGISTICS	
[x]	DP	DEP DIST ENGR (PM)		[x]	OC	OFFICE OF COUNSEL	8/2/01
[x]	DX	EXECUTIVE ASSISTANT		[ ]	PA	PUBLIC AFFAIRS	
[ ]	DB	SMALL BUSINESS		[x]	PD	PLANNING	
[x]	CO	CON-OPS	8/2/01	[ ]	PM	SECURITY	
[ ]	CP	CIVILIAN PERSONNEL		[ ]	RE	REAL ESTATE	
[ ]	CT	CONTRACTING		[ ]	RD	REGULATORY	
[ ]	EE	EEO		[ ]	RM	RESOURCE MGMT	
[ ]	EN	ENGINEERING		[ ]	SO	SAFETY OFFICE	

Purpose:

The purpose of this document is for the District Commander to make a determination that an Environmental Impact Statement is not required based on staff recommendations summarized in the EA.

Background:

Discussion:

[ ]	**Action**	[✓]	**Approval**	[ ]	**As Requested**	[ ]	**Comment**
[ ]	**FYI**	[ ]	**Note and Return**	[ ]	**Per Conversation**	[✓]	**Signature**

CESAJ FORM 1259, NOV 97

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P. O. BOX 4970
JACKSONVILLE, FLORIDA 32232-0019

REPLY TO
ATTENTION OF

MAINTENANCE DREDGING AND BENEFICIAL USES OF DREDGED MATERIAL TAMPA HARBOR HILLSBOROUGH COUNTY, FLORIDA

FINDING OF NO SIGNIFICANT IMPACT

I have reviewed the Environmental Assessment (EA) of the proposed action. This Finding incorporates by reference all discussions and conclusions contained in the Environmental Assessment attached hereto. Based on information analyzed in the EA, reflecting pertinent information obtained from other agencies and special interest groups having jurisdiction by law and/or special expertise, I conclude that the proposed action will have no significant impact on the quality of the human environment. Reasons for this conclusion are, in summary:

1. The proposed work would not jeopardize the continued existence of any endangered or threatened species.

2. The State Historic Preservation Officer concurred with the U.S. Army Corps of Engineers' determination that there would be no effect on sites of cultural or historical significance.

3. State water quality standards will be met.

4. The proposed project has been determined to be consistent with the Florida Coastal Zone Management Program.

5. Measures to eliminate, reduce, or avoid potential impacts to fish and wildlife resources will be implemented during project construction.

6. Benefits to the public will be maintenance of the navigation channel, potential increased seagrass bed growth, upland placement area life extension and continued local economic stimulus.

In consideration of the information summarized, I find that the proposed action will not significantly affect the human environment and does not require an Environmental Impact Statement.

5 SEP 01
Date

James G. May
Colonel, Corps of Engineers
Commanding

August 2001

Environmental Assessment

Maintenance Dredging and Beneficial Use of Dredged Material
Tampa Harbor – MacDill Seagrass Bed and Harbor Isle Lake Restoration
Hillsborough and Pinellas Counties, Florida

U.S. Army Corps
of Engineers
Jacksonville District

Table of Contents

1 Purpose and Need for Action

1.1 Introduction.

The Jacksonville District, US Army Corps of Engineers is the responsible federal agency for maintaining Tampa Harbor, Florida. Certain areas of the harbor develop shoals and impede the navigable capacity of the channel. The harbor has been previously dredged and the material has been placed in dredged Material Management Areas CMDA-2D and CMDA-3D. In order to meet the public need as authorized by Congress, the Federal standard must be maintained. The purpose of placing dredged material in the former borrow area adjacent to MacDill Air Force Base (AFB) and the Harbor Isle Lake is to improve water quality and in the former to raise the bottom elevation to a depth which could promote seagrass growth (See Public Notice Drawing No. 1, Appendix I).

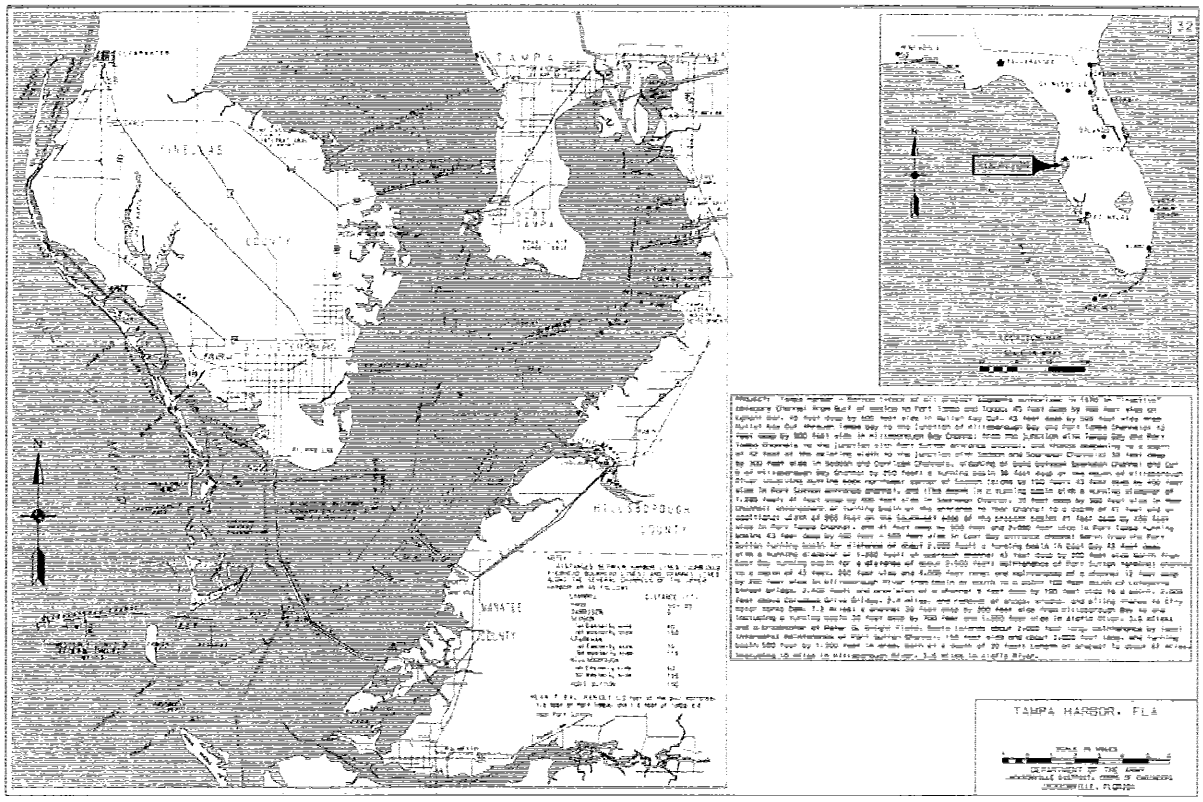

Figure 1, Tampa Harbor Navigation Project

1.2 Authority.

Rivers and Harbors Act of December 31, 1970, House Document 401, 91st Congress, 2nd Session.

SPONSOR: Tampa Port Authority
Post Office Box 2192
Tampa, Florida 33601

1.3 Decision to be Made.

The decision to be made is whether to place dredged material in the MacDill AFB borrow area, Harbor Isle Lake or in the normal upland dredged material management area.

1.4 Relevant Issues

a. Water quality
b. Benthos
d. Seagrass
e. Fisheries
f. Manatees
g. Historic Properties
h. Aesthetics
i. Recreation
j. Economics
k. Navigation

1.5 Permits Required.

The maintenance dredging and nearshore placement of the dredged material will require a modification of a Florida Department of Environmental Protection Water Quality Certification in accordance with the Memorandum of Understanding between DEP and the US Army Corps of Engineers, and in accordance with Section 401 of the Clean Water Act. In addition, the work must be consistent with the Florida Coastal Zone Management Program.

1.6 Methodology.

An interdisciplinary team used a systematic approach to analyze the affected area, to estimate the environmental effects, and to write the environmental impact assessment. This included literature searches, coordination with agencies and private groups having expertise in particular areas, and field investigations.

2 ALTERNATIVES.

2.1 Introduction.

The Alternatives section is the heart of this Environmental Assessment. This section describes in detail the no-action alternative, the proposed action, and other reasonable alternatives that were studied in detail. Then based on the information and analysis presented in the sections on the Affected Environment and the Probable Impacts, this section presents the beneficial and adverse environmental effects of all alternatives in comparative form, providing a clear basis for choice among the options for the decisionmaker and the public. A summary of this comparison is located in the alternative comparison chart, Table 2.1, page 5. This section has five parts:

a. A description of the process used to formulate alternatives.

b. A description of alternatives that were considered but were eliminated from detailed consideration.

c. A description of each alternative.

d. A comparison of the alternatives.

e. The identification of the preferred alternative.

2.2 History of Alternative Formulation.

In our search for Beneficial Uses of Dredged Material (a Corps sponsored program with environmental benefits as its goal) and meetings with the Habitat Restoration Committee of the Agency on Bay Management, various restoration projects were identified. Some of the projects in Tampa Bay could use dredged material to assist in the effort.

2.3 Eliminated Alternatives.

A comparison of the projects was conducted to determine the relative costs of the restoration in comparison with the cost of the normal dredging and placement in Dredged Material management Area CMDA-2D or CMDA-3D. The only restoration projects that have been identified that was equal to or less than the normal method was the placement of the material in the hole adjacent to MacDill AFB and the Harbor Isle Lake. Other projects were more expensive and would require additional funds and authorization under Section 204 of the Water Resources Development Act of 1996.

2.4 Description of Alternatives.

The only alternative to filling this borrow area is the No Action alternative.

2.4.1 No Action Alternative.

The No Action Alternative would include the maintenance dredging of this area and the normal upland placement in CMDA-2D or CMDA-3D. The dredging and placement in the upland DMMA's would meet State water quality standards. The impacts to migratory birds would be mitigated by the implementation of the Districts Migratory Bird Protection Plan. The basics of the plan include voluntary avoidance of the bird-nesting season, monitoring during the season and avoidance of nesting areas during construction. The impacts to manatees would be mitigated by the implementation of the standard manatee protection conditions (Appendix II).

b. Table 2.1, Alternative Comparison

RESOURCES	NO ACTION (Normal maintenance and placement)	DREDGING AND FILLING HARBOR ISLE LAKE	DREDGING AND MACDILL HOLE PLACEMENT
Water Quality	Minor increase in turbidity at dredge site.	Minor short-term increase in turbidity at dredge site and from mixing in the water column at the placement site. Long-term increase in water quality from reduction in stratification of oxygen-poor water	Minor short-term increase in turbidity at dredge site and from mixing in the water column at the placement site. Long-term increase in water quality from reduction in stratification of oxygen-poor water
Navigation	Major long-term benefit to navigation..	Major long-term benefit to navigation.	Major long-term benefit to navigation.
Benthos	Minor long-term reduction of benthos at the dredging site	Minor long-term reduction of benthos at the dredging site.	Minor long-term reduction of benthos at the dredging site and disposal site
Manatees	No impact with inclusion of special manatee protection conditions in contract	No impact with inclusion of special manatee protection conditions in contract.	No impact with inclusion of special manatee protection conditions in contract.
Fisheries	No impact.	Short-term loss of fish during placement within lake. Long-term benfit by improving water quality and health of fishery.	Incremental loss of cold water refugia and edge effect. Long-term benefit by creating shallow-water habitat for juvenile fish.
Seagrass	No impact..	Minor short-term impact on seagrasses from pipeline placement. Impacts mitigated by avoidance.	Medium long-term benefits from reconstruction of bottom depths with potential for sea grass recolonization.
Migratory Birds	Short-term disruption to bird nesting. Impacts mitigated by implementing protection conditions and monitoring.	Minor short-term impact if work is conducted during nesting season. Impacts mitigated by implementing protection plan.	No impacts
Historic Properties	No adverse effect.	No adverse effect.	No adverse effect.
Recreation	No impacts.	Short-term disruption to fishing at placement site and at the pipeline route.	Short-term disruption to fishing at placement site.
Aesthetics	Minor short-term impact from the presence and operation of construction equipment in a commercial port	Minor short-term impact from the presence and operation of construction equipment in the residential area and Grande Bayou waterway..	Minor short-term impact from the presence and operation of construction equipment in a commercial port and open water area near military runway.
Economics	Medium short-term impact on the local economy from the sale of goods and services in support of the construction.	Medium short-term impact on the local economy from the sale of goods and services in support of the construction.	Medium short-term impact on the local economy from the sale of goods and services in support of the construction.

2.4.2 Dredging and Placement in the MacDill Hole.

The project consists of the maintenance dredging of the Tampa Harbor Navigation Channel in the vicinity of Cut G. The material would be placed in the designated hole adjacent to MacDill AFB. Each dredging occurrence would produce approximately 60,000 to 80,000 cubic yards of material. It would take approximately 800,000 cubic yards of material to raise the elevation of the bottom to within 1 meter of the surface. The impacts to manatees would be mitigated by the implementation of the standard manatee protection conditions (Appendix II).

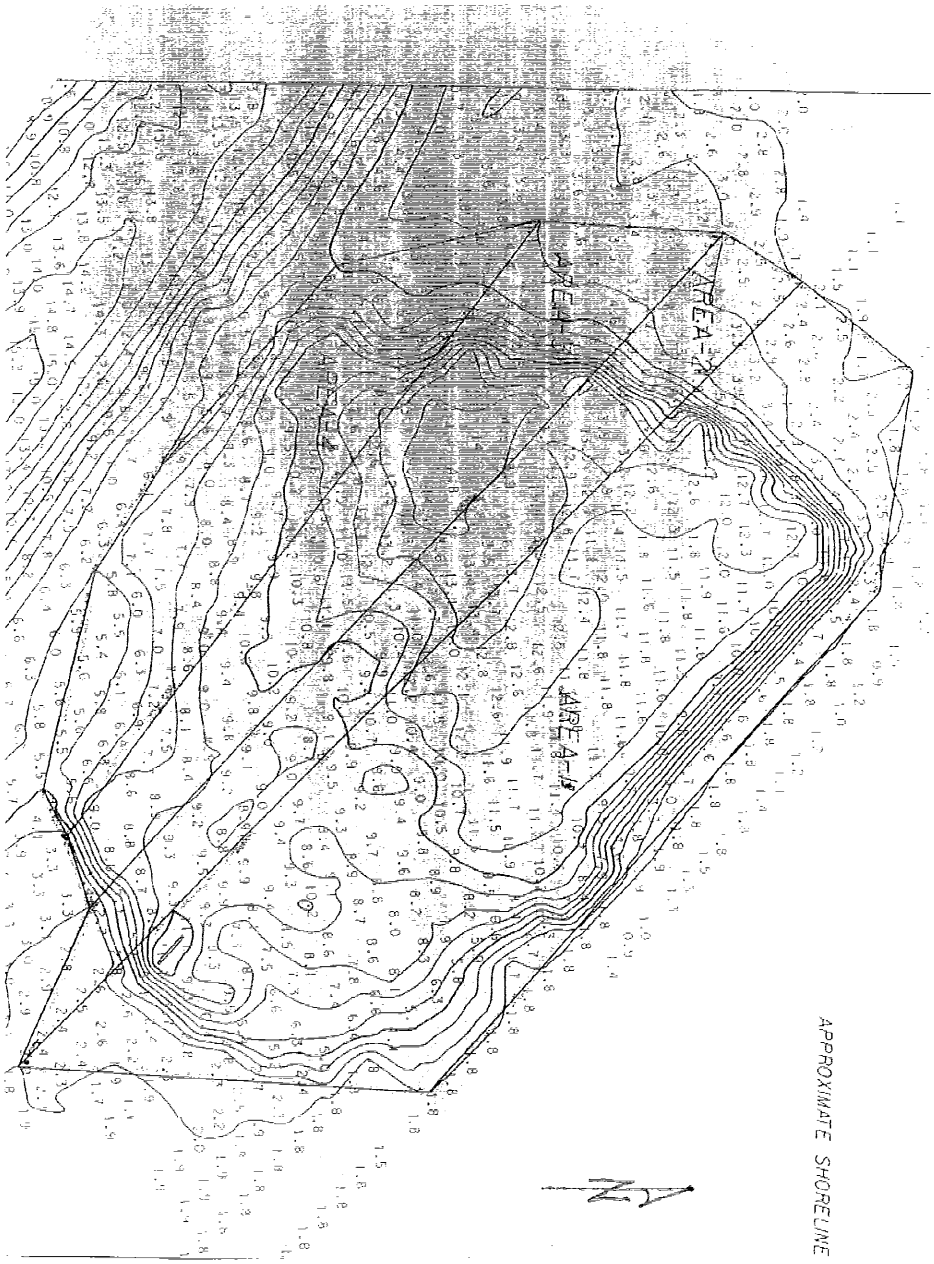

Figure 2, MacDill Hole bathymetry

2.4.3 Dredging and Placement in the Harbor Isle Lake.

The project consists of the maintenance dredging of the Tampa Harbor Navigation Channel in the vicinity of Cut G. The dredged material would be transported by barge to Grande Bayou where it would be transported by pipeline, laid along the bottom of the channel to the disposal site. The dredged material would be placed in an upland lake known as Harbor Isles Lake. The standard manatee precautions would also be implemented during dredging (Appendix II). This includes observers and equipment shutdown should manatees come within 50 feet of the operation. Special precautions would also be implemented to avoid impacting seagrasses and mangroves. Local noise ordinances would be complied with.

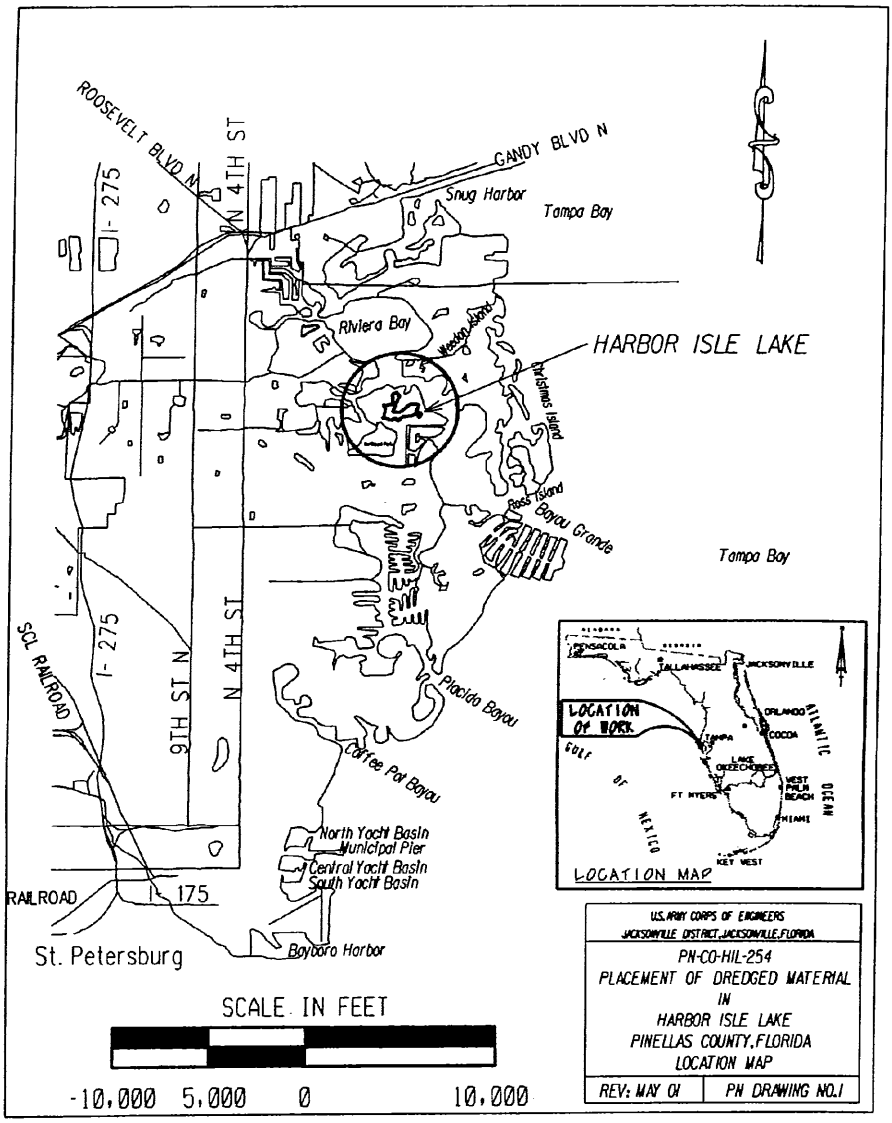

Figure 3, Harbor Isle Lake location

3 AFFECTED ENVIRONMENT.

3.1 INTRODUCTION.

The Affected Environment section succinctly describes the existing environmental resources of the areas that would be affected if any of the alternatives were implemented. This section describes only those environmental resources that are relevant to the decision to be made. It does not describe the entire existing environment, but only those environmental resources that would affect or that would be affected by the alternatives if they were implemented. This section, in conjunction with the description of the "no-action" alternative forms the base line conditions for determining the environmental impacts of the proposed action and reasonable alternatives. The environmental issues that are relevant to the decision to be made are the following:

a. Water quality.

b. Navigation.

c. Benthos

d. Manatees.

e. Fisheries.

f. Seagrass

g. Migratory Birds

h Historic Properties.

i. Recreation.

j. Aesthetics.

k. Economics.

3.2 GENERAL DESCRIPTION.

Tampa Bay is the largest estuary on the West Coast of Florida (USFWS, 1984). As man developed the Bay, the resources have been impacted. The Bay has been excavated for navigation purposes; islands and fast land have been created from the dredged material; ports and residential development have encroached on the aquatic environment; and numerous effluents have been discharged into the Bay. Tampa Bay has mangrove and emergent wetlands along the fringe of the bay where development has not occurred. These wetland areas provide cover and spawning areas for fish and shrimp. The mature mangroves provide nesting areas for birds such as the pelican. These wetlands cause improved water quality of the Bay from trapping sediments and nutrient uptake.

Figure 4, Harbor Isle Lake aerial photograph

3.3 RELEVANT ISSUES.

3.3.1 Physical.

a. Water quality. Tampa Bay receives storm runoff from agricultural and residential areas of Pinellas, Hillsborough and Manatee Counties as well as discharges from sewage treatment plants and other facilities. As a result bay waters are high in nitrogen and phosphorous and turbidity has reduced light penetration to 8 feet or less in many areas. The water quality tends to improve as the entrance to the bay is approached. West of the Skyway Bridge water quality improves markedly as the bay meets the Gulf of Mexico. Water quality within Harbor Isle Lake is poor due to the pesticides and fertilizers entering from surface water drainage. The lake is relatively deep which does not allow for aquatic vegetation to grow or mixing of the water column. This allows stratification with the poorly oxygenated water to settle at the bottom.

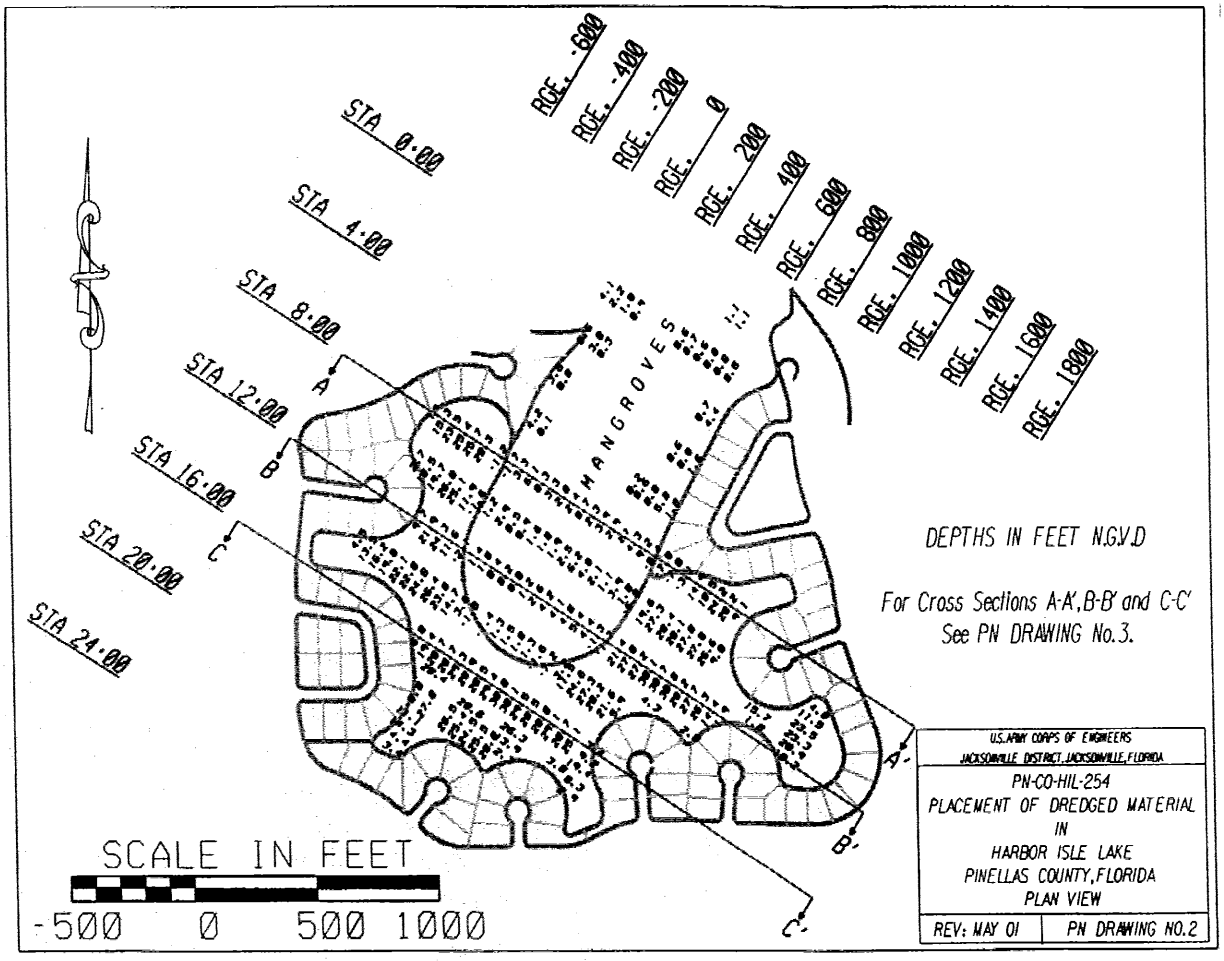

Figure 5, Harbor Isle Lake configuration

3.3.2 Biological.

a. Benthos. The benthic areas within the navigation channel are subject to constant sedimentation. There would likely be a few organisms within the 43-foot depths.

b. Manatees. The Florida manatee, *Trichechus manatus*, is a federally listed endangered species. They use the estuary for feeding, resting and traveling. They are especially known to congregate around the areas of seagrasses and warm water outfalls associated with manufacturing and power generation.

c. Fisheries. The Bay supports a wide variety of aquatic life including the American oyster which is harvested from the lower Tampa Bay, three species of clams, blue crab, and numerous species of fish: the red drum, spotted seatrout, snook, sheephead, southern flounder, Florida pompano, striped mullet, Gulf menhaden, and the black drum (USFWS, 1984). Many offshore fish spend their juvenile stages in the Bay estuary. These include the red and gag groupers, jewfish, scamp, and the red and mangrove snappers. Studies have been conducted of the use of holes as habitat and cold water refugia (FMRI, 1995). The relative location and availability for use determines its importance to the Bay fishery. Surveys indicate that the MacDill hole is used by a large number of species including snook (FMRI, 1995). It is located in shallow areas surrounded on 3 sides by patchy seagrass beds and adjacent to a deep tidal trough (approximately 30 feet) on the south side. Harbor Isle Lake contains a brackish water fishery.

d. Seagrass. Five species of seagrasses are found in the Bay; turtlegrass, shoalgrass, manateegrass, widgeon grass, and *Halophila engelmannii* (Lewis, 1984). Seagrass beds are located along the shoreline on shoals north of the placement site. Sea grass beds offer habitat for juvenile species of red drum, spotted sea trout, silver perch, sheepshead and snook (USFWS, 1998). As stated previously, the MacDill hole is surrounded on 3 sides by patchy seagrass beds. Seagrasses are present within Grande Bayou. Areas very between patchy and solid seagrass beds and are located mostly along the north side of the channel.

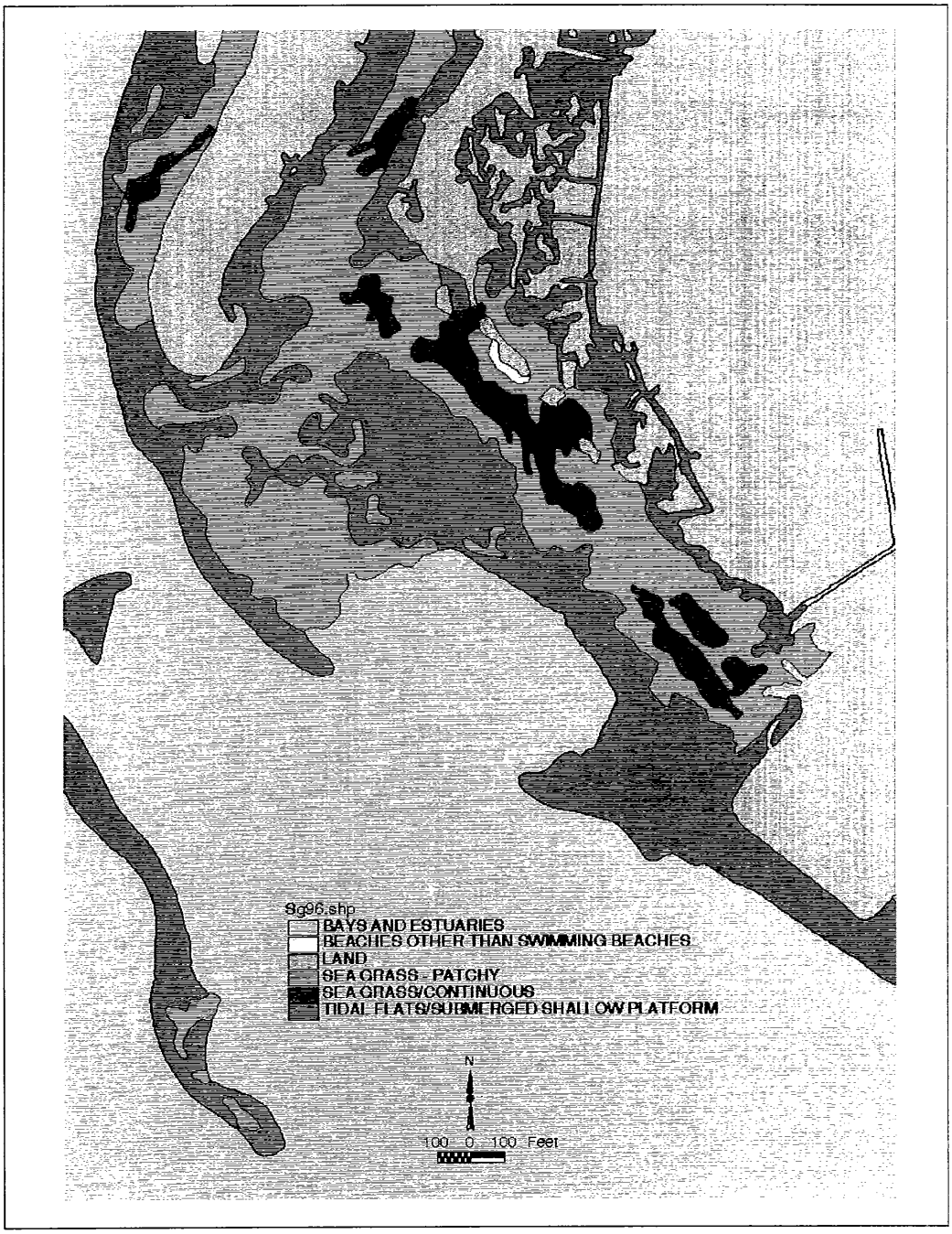

Figure 6, Seagrass beds, MacDill Hole